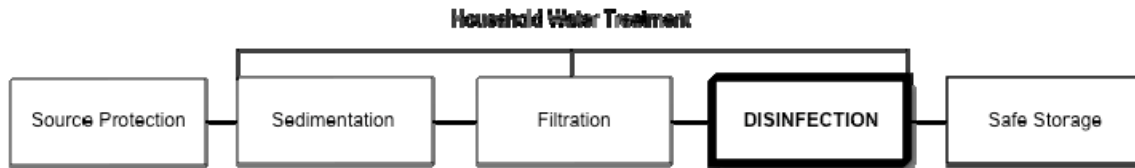


Household Water Treatment and Safe Storage Fact Sheet: Boiling

The Treatment Process



Effectiveness

Very Effective For:	Somewhat Effective For:	Not Effective For:
<ul style="list-style-type: none"> • Bacteria • Viruses • Protozoa • Helminths 		<ul style="list-style-type: none"> • Turbidity • Chemicals • Taste, smell, colour

How Does it Work?

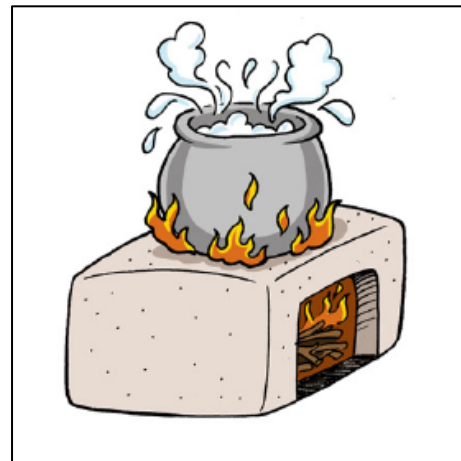
Boiling is considered the world's oldest, most common, and one of the most effective methods for disinfecting water. Pathogens are killed when the temperature reaches 100 degrees Celsius. CAWST recommends boiling water for 1 minute and adding 1 minute per 1000 metres of elevation.

Effectiveness

- Quality: Very effective in killing all pathogens
- Quantity: Depends on the size of pot being used
- Local water: Can be used with any water source

Appropriateness

- Local availability: Different fuel sources may be locally available (e.g. wood, charcoal, biomass, biogas, kerosene, propane, solar panels, electricity)
- Time: Need to heat water until it boils for 1 minute
- Operation and maintenance: Water is heated over a fire or stove until it boils; potential for burn injuries; cause of respiratory infections associated with poor indoor air quality
- Lifespan: Pots and stove may need to be replaced



Acceptability

- Taste, smell, colour: Some people believe that boiled water tastes flat; does not change smell or colour
- Ease of use: It may take a lot of time to collect enough fuel

Cost

- Initial purchase cost: Free or low cost since households can use existing pots
- Operating cost: On-going cost for fuel; cost varies depending on the type of fuel